

| Ref # | Hits | Search Query  | DBs                          | Default Operator | Plurals | Time Stamp       |
|-------|------|---|------------------------------|------------------|---------|------------------|
| S1    | 8095 | 375/354-376.CCLS.   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/08/18 13:18 |
| S2    | 84   | S1 AND "frequency locked loop"  | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 10:46 |
| S3    | 551  | "frequency locked loop"   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 13:04 |
| S4    | 467  | S3 NOT S2   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 10:46 |
| S5    | 196  | S4 AND intermediate   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:02 |
| S6    | 18   | S1 AND ("intermediate frequency" WITH synchronize\$)  | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:20 |
| S7    | 585  | S1 AND (frequency WITH synchronize)   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:13 |
| S8    | 581  | S7 NOT S6   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:13 |
| S9    | 46   | S8 AND CDMA   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:13 |
| S10   | 185  | ("intermediate frequency" WITH synchronize\$)   | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:20 |
| S11   | 167  | S10 NOT S6  | US-PGPUB;<br>USPAT           | OR               | ON      | 2005/03/01 11:20 |
| S12   | 9    | ("3611152"   "3904980"   "4001714"   "4262264"   "4550312"   "4881273"   "5115515"   "5146616"   "5548811").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2005/03/01 12:45 |
| S13   | 1    | ("6031883").URPN.   | USPAT                        | OR               | ON      | 2005/03/01 12:47 |
| S14   | 2    | ("4152669"   "5349310").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2005/03/01 12:48 |
| S15   | 0    | ("6519305").URPN.   | USPAT                        | OR               | ON      | 2005/03/01 12:48 |
| S16   | 8    | ("4916405"   "5128968"   "5170415"   "5301210"   "5390348"   "5541965"   "5596605"   "5644606").PN.             | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2005/03/01 12:48 |
| S17   | 0    | ("2002/0025782").URPN.  | USPAT                        | OR               | ON      | 2005/03/01 12:49 |

|     |      |   |                              |    |    |                  |
|-----|------|---|------------------------------|----|----|------------------|
| S18 | 30   | ("3614665"   "3931578"  <br>"4106059"   "4145659"  <br>"4189750"   "4259644"  <br>"4306205"   "4352209"  <br>"4399419"   "4472685"  <br>"4520507"   "4575761"  <br>"4581643"   "4691378"  <br>"4901033"   "4901036"  <br>"4905087"   "5034695"  <br>"5038404"   "5179729"  <br>"5233425"   "5272534"  <br>"5280644"   "5311318"  <br>"5423076"   "5457817"  <br>"5600680"   "5739874"  <br>"5774194"   "5857004").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/01 13:00 |
| S19 | 2    | "quadrature phase shift" WITH<br>rotator  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/01 13:00 |
| S20 | 391  | "frequency locked loop" AND<br>"phase locked loop"  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 15:30 |
| S21 | 208  | "frequency locked loop" WITH<br>"phase locked loop"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/01 13:06 |
| S22 | 507  | "phase rotator"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/01 13:04 |
| S23 | 1    | "quadrature phase rotator"  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/01 13:05 |
| S24 | 7    | ("3622913"   "4273958"  <br>"4370520"   "4387470"  <br>"4451930"   "4454607"  <br>"4539707").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/01 16:04 |
| S25 | 10   | ("4607393").URPN.   | USPAT                        | OR | ON | 2005/03/01 16:05 |
| S26 | 4    | ("4348772"   "4817197"  <br>"4921467"   "4932072").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/01 16:06 |
| S27 | 30   | ("5115515").URPN.   | USPAT                        | OR | ON | 2005/03/01 16:06 |
| S28 | 8095 | 375/354-376.CCLS.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 09:30 |
| S29 | 102  | S28 AND "phase increment"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 09:33 |
| S30 | 1    | "6785345".PN.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 09:33 |
| S31 | 2    | ("5757239"   "6333649").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/02 09:34 |
| S32 | 0    | ("6785345").URPN.   | USPAT                        | OR | ON | 2005/03/02 09:38 |
| S33 | 595  | "direct digital synthesizer"  | USPAT                        | OR | ON | 2005/03/02 09:41 |
| S34 | 48   | "direct digital synthesizer" AND<br>CDMA  | USPAT                        | OR | ON | 2005/03/02 09:41 |

|     |       |  |                                 |    |    |                  |
|-----|-------|--|---------------------------------|----|----|------------------|
| S35 | 1     | ("6249539").PN.  | US-PGPUB;<br>USPAT;<br>USOCR    | OR | ON | 2005/03/02 09:47 |
| S36 | 0     | ("6831940").URPN.  | USPAT                           | OR | ON | 2005/03/02 10:14 |
| S37 | 1116  | "frequency bin"  | USPAT                           | OR | ON | 2005/03/02 10:14 |
| S38 | 1116  | "frequency bins"   | USPAT                           | OR | ON | 2005/03/02 10:14 |
| S39 | 270   | S38 AND doppler  | USPAT                           | OR | ON | 2005/03/02 10:15 |
| S40 | 712   | S38 AND (doppler shift)  | USPAT                           | OR | ON | 2005/03/02 10:15 |
| S41 | 132   | S38 AND "doppler shift"  | USPAT                           | OR | ON | 2005/03/02 11:10 |
| S42 | 0     | "programmable rotor"   | USPAT                           | OR | ON | 2005/03/02 11:19 |
| S43 | 28    | SINDHUSHAYANA.IN. AND<br>NAGABHUSHANA.IN.  | USPAT                           | OR | ON | 2005/03/02 11:14 |
| S44 | 79    | SINDHUSHAYANA.IN. AND<br>NAGABHUSHANA.IN.  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2005/03/02 11:11 |
| S45 | 11    | GLAZKO.IN. AND SERGUEI.IN.   | USPAT                           | OR | ON | 2005/03/02 11:15 |
| S46 | 0     | "BLACK.IN" AND PETER.IN.   | USPAT                           | OR | ON | 2005/03/02 11:15 |
| S47 | 0     | "BLACK.IN" AND PETER.IN.   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2005/03/02 11:15 |
| S48 | 903   | "phase rotor"  | USPAT                           | OR | ON | 2005/03/02 11:19 |
| S49 | 317   | "phase rotator"  | USPAT                           | OR | ON | 2005/03/02 11:19 |
| S50 | 49    | quadrature WITH "phase rotator"  | USPAT                           | OR | ON | 2005/03/02 11:19 |
| S51 | 5     | ("5905721"   "6047020"  <br>"6078573"   "6219341"  <br>"6240099").PN.  | US-PGPUB;<br>USPAT;<br>USOCR    | OR | ON | 2005/03/02 11:28 |
| S52 | 4     | ("6466566").URPN.  | USPAT                           | OR | ON | 2005/03/02 11:29 |
| S53 | 12    | ("4481640"   "4724435"  <br>"4804938"   "5042050"  <br>"5077753"   "5103459"  <br>"5150377"   "5280472"  <br>"5309474"   "5351270"  <br>"5375140"   "5416797").PN. | US-PGPUB;<br>USPAT;<br>USOCR    | OR | ON | 2005/03/02 11:53 |
| S54 | 8     | ("5732111").URPN.  | USPAT                           | OR | ON | 2005/03/02 14:51 |
| S55 | 0     | "showlace fastener"  | USPAT                           | OR | ON | 2005/03/03 08:36 |
| S56 | 16    | "shoelace fastener"  | USPAT                           | OR | ON | 2005/03/02 14:52 |
| S57 | 5     | ("5905721"   "6047020"  <br>"6078573"   "6219341"  <br>"6240099").PN.  | US-PGPUB;<br>USPAT;<br>USOCR    | OR | ON | 2005/03/02 15:28 |
| S58 | 4     | ("6466566").URPN.  | USPAT                           | OR | ON | 2005/03/02 15:28 |
| S59 | 29386 | "20" AND "375"/\$.CCLS.  | US-PGPUB;<br>USPAT              | OR | ON | 2005/03/02 15:31 |
| S60 | 391   | "frequency locked loop" AND<br>"phase locked loop"   | US-PGPUB;<br>USPAT              | OR | ON | 2005/03/02 15:31 |

|     |      |  |                              |    |    |                  |
|-----|------|--|------------------------------|----|----|------------------|
| S61 | 391  | S60  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 15:31 |
| S62 | 120  | S61 AND "375"/\$.CCLS.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/02 15:32 |
| S63 | 2    | "phase offset accumulator"   | USPAT                        | OR | ON | 2005/03/03 08:42 |
| S64 | 1481 | digital WITH "phase error"   | USPAT                        | OR | ON | 2005/03/03 08:42 |
| S65 | 363  | S64 AND 375/354-376.CCLS.  | USPAT                        | OR | ON | 2005/03/03 08:43 |
| S66 | 7033 | 375/354-376.CCLS.  | USPAT                        | OR | ON | 2005/08/18 10:05 |
| S67 | 3198 | 375/371-376.CCLS.  | USPAT                        | OR | ON | 2005/03/03 08:43 |
| S68 | 299  | S67 AND (digital WITH "phase error")   | USPAT                        | OR | ON | 2005/03/03 08:44 |
| S69 | 323  | S67 AND "digital phase locked loop"  | USPAT                        | OR | ON | 2005/03/03 08:44 |
| S70 | 11   | S69 AND "phase bit"  | USPAT                        | OR | ON | 2005/03/03 08:50 |
| S71 | 8    | S67 AND "phase error accumulator"  | USPAT                        | OR | ON | 2005/03/03 08:59 |
| S72 | 7    | S71 NOT S70  | USPAT                        | OR | ON | 2005/03/03 08:53 |
| S73 | 68   | S67 AND (phase ADJ3 threshold)   | USPAT                        | OR | ON | 2005/03/03 08:53 |
| S74 | 2    | S67 AND "phase error accumulator" AND threshold  | USPAT                        | OR | ON | 2005/03/03 09:08 |
| S75 | 695  | "phase accumulator"  | USPAT                        | OR | ON | 2005/03/03 09:08 |
| S76 | 81   | S75 AND QPSK   | USPAT                        | OR | ON | 2005/03/03 09:08 |
| S77 | 17   | S76 AND threshold  | USPAT                        | OR | ON | 2005/03/03 09:08 |
| S78 | 2    | ("5696797"   "6424185").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/03 09:12 |
| S79 | 15   | ("3603893"   "3715663"  <br>"3761825"   "4463452"  <br>"4466108"   "4484154"  <br>"4509017"   "4701934"  <br>"4896336"   "5095538"  <br>"5184241"   "5272446"  <br>"5355092"   "5369378"  <br>"5535249").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/03 09:28 |
| S80 | 263  | S66 AND doppler  | USPAT                        | OR | ON | 2005/03/03 09:31 |
| S81 | 90   | S80 AND accumulats   | USPAT                        | OR | ON | 2005/03/03 09:50 |
| S82 | 0    | QPSK ADJ rotator   | USPAT                        | OR | ON | 2005/03/03 10:06 |
| S83 | 6    | "key rotator"  | USPAT                        | OR | ON | 2005/03/03 10:07 |
| S84 | 0    | "shift key rotator"  | USPAT                        | OR | ON | 2005/03/03 10:44 |
| S85 | 0    | S67 AND "programmable rotator"   | USPAT                        | OR | ON | 2005/03/03 10:07 |
| S86 | 0    | S67 AND "programable rotator"  | USPAT                        | OR | ON | 2005/03/03 10:07 |
| S87 | 49   | S67 AND rotator  | USPAT                        | OR | ON | 2005/03/03 10:07 |
| S88 | 6    | S87 AND doppler  | USPAT                        | OR | ON | 2005/03/03 10:07 |

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|----------|-------|---|------------------------------|----|----|------------------|
| S89      | 1     | ("3818347").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/03/03 10:19 |
| S90      | 12    | ("4604583").URPN.   | USPAT                        | OR | ON | 2005/03/03 10:19 |
| S91      | 13    | "step rotator"  | USPAT                        | OR | ON | 2005/03/03 10:44 |
| S92      | 3     | S66 AND (rotator ADJ3 step)   | USPAT                        | OR | ON | 2005/03/03 10:45 |
| S93      | 1     | "20020114405"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 11:42 |
| S94      | 22    | "8 phase shift key"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 11:43 |
| S95      | 381   | "8 phase shift" OR "8-phase shift"  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 11:43 |
| S96      | 183   | S95 AND @ad<"20010101"  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 13:29 |
| S97      | 32682 | "base station" AND network  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 13:30 |
| S98      | 2133  | S97 AND QPSK  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 13:30 |
| S99      | 1861  | S98 AND mobile  | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 13:30 |
| S10<br>0 | 29    | S99 AND 375/140.CCLS.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/03/03 13:30 |
| S10<br>1 | 616   | "maximum likelihood detection"  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 14:32 |
| S10<br>2 | 0     | "maximum likelihood detection"<br>WITH "signal point" WITH least<br>WITH distance | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 14:32 |
| S10<br>3 | 1     | "maximum likelihood detection"<br>WITH "signal point"                             | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 14:32 |
| S10<br>4 | 0     | "maximum likelihood detection"<br>NEAR distance                                   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 14:55 |
| S10<br>5 | 0     | "maximum likelihood detection"<br>NEAR least                                      | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 14:55 |
| S10<br>6 | 15    | "maximum likelihood detection"<br>WITH least                                      | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 15:02 |
| S10<br>7 | 1     | "5105422".pn.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 15:03 |
| S10<br>8 | 1     | "5,105,442".pn.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/08 15:03 |

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|----------|-----|--|------------------------------|----|----|------------------|
| S10<br>9 | 17  | ("3332035"   "3421111"  <br>"3889210"   "4609884"  <br>"5081429"   "5097228"  <br>"5373264"   "5386239"  <br>"5594757"   "5602881"  <br>"5619524"   "5659573"  <br>"5684836"   "5691974"  <br>"5751776").PN.             | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 08:22 |
| S11<br>0 | 6   | ("6363102").URPN.  | USPAT                        | OR | ON | 2005/08/09 08:28 |
| S11<br>1 | 637 | 375/344.CCLS.  | USPAT                        | OR | ON | 2005/08/09 08:28 |
| S11<br>2 | 579 | S111 AND @ad<"20010101"  | USPAT                        | OR | ON | 2005/08/09 08:28 |
| S11<br>3 | 149 | S112 AND accumulats  | USPAT                        | OR | ON | 2005/08/09 08:29 |
| S11<br>4 | 5   | ("4926499"   "4943982"  <br>"4947409"   "4959656"  <br>"5001727").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:19 |
| S11<br>5 | 39  | ("5440587").URPN.  | USPAT                        | OR | ON | 2005/08/09 09:21 |
| S11<br>6 | 1   | ("4227152").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:27 |
| S11<br>7 | 37  | ("5471508").URPN.  | USPAT                        | OR | ON | 2005/08/09 09:27 |
| S11<br>8 | 9   | ("3936753"   "4004233"  <br>"4213006"   "4328587"  <br>"4817192"   "5109544"  <br>"5317600"   "5457716"  <br>"5563537").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:32 |
| S11<br>9 | 2   | ("5774799").URPN.  | USPAT                        | OR | ON | 2005/08/09 09:33 |
| S12<br>0 | 16  | ("4888557"   "4893316"  <br>"4926443"   "5048059"  <br>"5070303"   "5084669"  <br>"5093848"   "5136616"  <br>"5148373"   "5159705"  <br>"5241702"   "5331666"  <br>"5335250"   "5568518"  <br>"5568520"   "5754591").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:35 |
| S12<br>1 | 2   | ("6205183").URPN.  | USPAT                        | OR | ON | 2005/08/09 09:35 |

|          |      |   |                              |    |    |                  |
|----------|------|---|------------------------------|----|----|------------------|
| S12<br>2 | 18   | ("3727134"   "4004226"  <br>"5117232"   "5223843"  <br>"5285480"   "5315619"  <br>"5471508"   "5497400"  <br>"5604769"   "5671253"  <br>"5706057"   "5799037"  <br>"5835532"   "5940450"  <br>"5943363"   "5995520"  <br>"6226323"   "6266380").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:36 |
| S12<br>3 | 4    | ("6363124").URPN.   | USPAT                        | OR | ON | 2005/08/09 09:37 |
| S12<br>4 | 5    | ("5193224"   "5345311"  <br>"5757864"   "5991342"  <br>"6452983").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2005/08/09 09:38 |
| S12<br>5 | 0    | ("6631174").URPN.   | USPAT                        | OR | ON | 2005/08/09 09:39 |
| S12<br>6 | 33   | "shift register" WITH truncate  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:39 |
| S12<br>7 | 5643 | "shift register" WITH "control<br>signal"   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:46 |
| S12<br>8 | 4    | "shift register" WITH truncate<br>WITH control  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:40 |
| S12<br>9 | 1    | "shift register" WITH "control<br>signal" WITH truncate   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:46 |
| S13<br>0 | 3    | "shift" WITH "control signal"<br>WITH truncate  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:50 |
| S13<br>1 | 2    | 375/344.CCLS. AND truncate  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 09:50 |
| S13<br>2 | 17   | 375/354-376.CCLS. AND truncate  | USPAT                        | OR | ON | 2005/08/18 10:18 |
| S13<br>3 | 212  | phase ADJ rotat\$ WITH bit  | USPAT                        | OR | ON | 2005/08/18 11:41 |
| S13<br>4 | 1    | "6326851".pn.   | USPAT                        | OR | ON | 2005/08/18 11:46 |
| S13<br>5 | 1    | "5430415".pn.   | USPAT                        | OR | ON | 2005/08/18 11:46 |
| S13<br>6 | 305  | 375/354-376.CCLS. AND (phase<br>ADJ rotat\$)  | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/18 13:18 |
| S13<br>7 | 1    | "6631174".pn.   | US-PGPUB;<br>USPAT           | OR | ON | 2005/08/22 06:43 |